

Abstract

A method and apparatus facilitates and enhances the operation of the spanning tree protocol in bridged computer networks. An intermediate network device in accordance with the present invention includes an enhanced spanning tree engine that is 5 configured to perform certain novel functions. First, the enhanced spanning tree engine is configured to identify and block ports at which messages are looped-back to the transmitting port, thereby avoiding the creation of network loops. In second aspect, the enhanced spanning tree engine rapidly transitions certain ports to a forwarding state to prevent associated applications from timing out and shutting down. Rather than moving 10 the ports through blocking, listening and learning states before reaching the forwarding state, selected ports may be transitioned directly to the forwarding state.